

## 3-Way Universal Crossover Network

40-1299B

OWNER'S MANUAL — Please read before using this equipment.

Your 3-Way Universal Crossover Network lets you get the best sound from your sound system. It splits the full audio range into three smaller ranges. High frequencies are sent to the tweeter, middle-range frequencies are sent to the mid-range speaker, and low frequencies are sent to the woofer. Since each speaker only receives the frequencies that it handles best, overall sound quality improves.

The crossover has four selectable crossover frequencies: 800, 1600, 5000, and 7000 Hz. Each speaker element has two options. The dividing networks are carefully designed to provide smooth crossover among speakers (with standard 6 dB/octave attenuation) so the specific frequency ranges that each speaker receives precisely match its capabilities. Experiment to find the proper crossover frequency for your woofer, mid-range, and tweeter.

### Notes:

- This crossover network uses a common grounding system and is only compatible with components that also operate using a common grounding system.
- This crossover network can handle up to 100 watts of audio power (maximum music power).
- The roll off crossover point may vary depends on the different speaker impedance. It is -6 dB for 4 ohm speakers and -3 dB for 8 ohm speakers.

## CONNECTIONS

**Caution:** Improper connections can damage your crossover and other components in your system. Before you install your crossover network, read all the installation instructions in this owner's manual and follow them carefully.

The crossover network has three sets of output terminals— woofer, midrange, and tweeter. Each set has three terminals, one - (common) and two + (hot) terminals. You can select the crossover frequency by using the appropriate hot terminal.

Terminal	Speaker	Crossover Frequency
A	Woofer	800 Hz
B	Woofer	1600 Hz
C	Mid-range	800 – 5000 Hz
D	Mid-range	1600 – 7000 Hz
E	Tweeter	5000 Hz
F	Tweeter	7000 Hz

### Notes:

- Take care to avoid creating air leaks in the enclosure while installing your crossover network.
  - Be sure to correctly match the input and output connections' polarity (left output to left input, and right output to right input).
  - When making connections, carefully remove insulation from the ends of the wires and solder the wires to the appropriate terminals.
1. Temporarily mount the crossover network in the selected location so you can determine the correct lead length. Use sheet metal or wood screws to mount the crossover network to the inside of the speaker enclosure. Remove the crossover to make the connections.

2. Connect the + side of the tweeter terminals to either the E (for 5000 Hz) or F (for 7000 Hz) terminal, depending on the crossover frequency you desire. Connect the – side of the tweeter terminals to the – terminal.
3. Connect the + side of the mid-range terminals to either the C (for 800–5000 Hz) or D (for 1600–7000 Hz) terminal depending on the crossover frequency you desire. Connect the – side of the mid-range terminals to the – terminal.
4. Connect the + side of the woofer terminals to either the A (for 800 Hz) or B (for 1600 Hz) terminal depending on the crossover frequency you desire. Connect the – side of the woofer terminals to the – terminal.
5. Make sure all wires are connected properly and well soldered. Be sure no stray wire strands (or solder) touch between adjacent terminals.
6. Connect the input terminals of the crossover network to a binding post, terminal strip or jack on the back of the speaker enclosure. Then connect wires from your amplifier/receiver to these points (or jack); be sure to match polarities (left output to left input and right output to right input) between these terminals and your amplifier/receiver.
7. Mount the crossover in the selected location.

## CARE

Keep the crossover network dry; if it gets wet, wipe it dry immediately. Use and store the crossover network only in normal temperature environments. Handle the crossover network carefully; do not drop it.

Modifying or tampering with the crossover network's components can cause a malfunction and might invalidate its warranty. If your crossover network is not performing as it should, take it to your local RadioShack store for assistance.

### Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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